Title (en)

METHOD AND SYSTEM FOR SIMULATING TEXTURE FEATURES OF A COATING

Title (de)

VERFAHREN UND SYSTEM ZUR SIMULATION VON TEXTURMERKMALEN EINER BESCHICHTUNG

Title (fr)

PROCÉDÉ ET SYSTÈME POUR SIMULER DES CARACTÉRISTIQUES DE TEXTURE D'UN REVÊTEMENT

Publication

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Application

EP 20739995 A 20200713

Priority

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Abstract (en)

[origin: WO2021013615A1] The present invention refers to a computer-implemented method for simulating texture features of a n-layer target coating (100), each layer (111, 112, 113) of the n-layer target coating (100) having known real geometrical properties and being composed of known individual ingredients with known real material properties, the method comprising at least the steps of: a) providing, via at least one communications interface, the known real geometrical properties and the known individual ingredients with the known real material properties, b) modelling, by at least one processor, the n-layer target coating (100) in a virtual environment, wherein each layer (111, 112, 113) of the n-layer target coating (100) is created according to its real geometrical and material properties; c) virtually tracing, by at least one of the at least one processor, rays of light from one or more light sources towards an aim region defined on a surface of the n-layer target coating (100) for simulating an interaction of incident light rays from the one or more light sources and the n-layer target coating (100); d) virtually collecting, by one or more receivers, rays of light that interacted with the n-layer target coating (100); e) virtually determining, by the one or more receivers, at least one of an angular, a spectral and a spatial distribution of intensity of the rays of light re- emitted from or reflected by the n-layer target coating (100), f) evaluating, by at least one of the at least one processor, the determined distribution(s) of intensity and outputting, by an output device, at least one image based on the evaluation.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

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